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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,237	09/09/2003	James Thomas Edward McDonnell	300200017-2	8845

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HEWLETT PACKARD COMPANY  
P O BOX 272400, 3404 E. HARMONY ROAD  
INTELLECTUAL PROPERTY ADMINISTRATION  
FORT COLLINS, CO 80527-2400

EXAMINER

NGUYEN, KHAI MINH

ART UNIT PAPER NUMBER

2687

DATE MAILED: 07/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/657,237

**Applicant(s)**

MCDONNELL ET AL.

**Examiner**

Khai M Nguyen

**Art Unit**

2687

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9/9/2003.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C 119(a)-(d), which papers have been placed of record in the file.

***Information Disclosure Statement***

2. The references listed in the Information Disclosure Statement filed on September 9, 2003 have been considered by the examiner (see attached PTO-1449 form or PTO/SB/08A and 08B forms).

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-10, and 12-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Deshpande (U.S.Pub-20030003933).

Regarding claim 1, Deshpande teaches a method wherein a cellular communications service provider authenticates a provider of a service running at a wireless hotspot (fig.1, abstract, paragraph 0002), the method comprising:

receiving an indication of potential use of a specified wireless hotspot from a user (fig.1, abstract, paragraph 0002, 0007, *if the mobile client determines that multiple APs are available at that location, it interrogates each of the APs to obtain information relating to the available services*);

verifying the trustworthiness of the provider of the service with a party independent from said provider (fig.1, abstract, paragraph 0008, *each of the network access service providers 12, 14, 16, 18 will generally have one or more service offering that users can take advantage* ); and

on successful verification of the provider of the service (fig.1, 3, paragraph 0008, 0021), providing the user with a confirmation that the provider of the service is authenticated by the cellular communications service provider (fig.1, 3, abstract, paragraph 0007, 0021).

Regarding claim 2, Deshpande teaches a method as claimed in claim 1, wherein the service is use of the hotspot and the provider of the service is a wireless hotspot provider (fig.1, 3, paragraph 0002, 0008).

Regarding claim 3, Deshpande teaches a method as claimed in claim 1, wherein the service is a service running over infrastructure of the wireless hotspot and the

provider of the service is not the provider of the wireless hotspot (fig.1, 3, abstract, paragraph 0002, 0008, 0021).

Regarding claim 4, Deshpande teaches a method as claimed in claim 1, wherein the confirmation provided comprises a key enabling the user to use the service provided by the provider (paragraph 0013, 0019).

Regarding claim 5, Deshpande teaches a method as claimed in claim 1, further including tracking the location of a user via a user's wireless communications device (fig.1, abstract, paragraph 0002); and

predicting, from the location of the user, a service at a wireless hotspot within current or future range of the user (paragraph 0002, 0013).

Regarding claim 6, Deshpande teaches a method as claimed in claim 5, further including supplying the user with information concerning the location of one or more hotspots close to the user or closest to the user.

Regarding claim 7, Deshpande teaches a method as claimed in claim 5, wherein the indication of potential use is determination that the hotspot is within present or future range of the user (paragraph 0002, 0007).

Regarding claim 8, Deshpande teaches a method as claimed in claim 7, further including receiving a positive request to use the service (paragraph 0007), and commencing authentication of the provider of the service before the positive request is received (paragraph 0002, 0007-0008).

Regarding claim 9, Deshpande teaches a method as claimed in claim 1, wherein the indication of potential use is a positive request from the user (paragraph 0002, 0007-0008).

Regarding claim 10, Deshpande teaches a computer system for a cellular telecommunications provider (fig.1, abstract, paragraph 0002), comprising a processor arranged for:

receiving an indication of potential use of a specified wireless hotspot from a user (fig.1, abstract, paragraph 0002, 0007, *if the mobile client determines that multiple APs are available at that location, it interrogates each of the APs to obtain information relating to the available services*);

identifying services available at the specified wireless hotspot (paragraph 0002, 0013-0014);

authenticating providers of the services available at the specified wireless hotspot (fig.1, 3, abstract, paragraph 0007, 0021); and preparing authentication information for use by the user (abstract, paragraph 0007-0008, 0021).

Regarding claim 12, Deshpande teaches a computer system as claimed in claim 10, wherein the processor is further arranged for receiving location information representing the location of the user (paragraph 0007-0008), and for determining from the location information one or more wireless hotspots that are or will be within the range of the user (fig.1, 3, abstract, paragraph 0002, 0007-0008).

Regarding claim 13, Deshpande teaches a computer system as claimed in claim 12, wherein the processor is further arranged for (a) receiving a positive request for use of a service at the hotspot from the user (paragraph 0007-0008), (b) commencing authenticating a provider of the service before the positive request is received (paragraph 0002, 0013) and (c) preparing authentication information for use by the user after the positive request is received (abstract, paragraph 0007-0008, 0021).

Regarding claim 14, Deshpande teaches a storage medium storing a computer-readable program code thereon (fig.1-3), the computer-readable program code being arranged to cause a computer system of a cellular communications provider to:

receive an indication of potential use of a specified wireless hotspot from a user (fig.1, abstract, paragraph 0002, 0007, *if the mobile client determines that multiple APs are available at that location, it interrogates each of the APs to obtain information relating to the available services*);

identify services available at the specified wireless hotspot (paragraph 0002, 0013-0014);

authenticate providers of the services available at the specified wireless hotspot (fig.1, 3, abstract, paragraph 0007, 0021); and prepare authentication information for provision to the user (abstract, paragraph 0007-0008, 0021).

Regarding claim 15, Deshpande teaches a method wherein a cellular telecommunications provider authorises a user to use a location-dependent service (fig.1-3), the method comprising:

tracking the location of the user via a wireless communications device of the user (fig.1, abstract, paragraph 0007-0008, 0014);

determining that the user is or will be within an operating range of the location-dependent service (paragraph 0002, 0007-0008, 0014);



authenticating a provider of the service (fig.1, 3, abstract, paragraph 0007, 0021);  
and

authenticating the provider of the service to the user (fig.1, 3, abstract, paragraph 0007, 0021).

Regarding claim 16, Deshpande teaches a method as claimed in claim 15, further comprising receiving a request to use the location-dependent service by the user (abstract, paragraph 0002, 0007-0008).

Regarding claim 17, Deshpande teaches a method as claimed in claim 16, wherein authenticating the provider of the service commences prior to receiving the request authenticating the provider of the service subsequent to receiving the request (paragraph 0001. 0013-0014).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Deshpande (U.S.Pub-20030003933) in view of Henry et al. (U.S.Pat-6856800).

Regarding claim 11, Deshpande teaches a computer system as claimed in claim 10,

Deshpande fails to specifically disclose the authentication information the processor is arranged for generating a cryptographic key. However, Henry teaches the authentication information the processor is arranged for generating a cryptographic key (abstract, col.2, lines 12-39). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the authentication information the processor is arranged for generating a cryptographic key as taught by Henry with Deshpande teaching in order to provide a novel authentication access control method that improves the handoff process for a mobile host that roams between networks.

#### ***Citation of Pertinent Prior Art***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Eriksson et al.** (U.S.Pub-20020059453) discloses Access point discovery and selection.

**Juppi et al.** (U.S.Pub-20030092450) discloses Method of transmitting area-specific information on a telecommunications network.

**Soderbacka et al.** (U.S.Pub-20030114158) discloses Intersystem handover of mobile terminal.

**Kobayakawa et al.** (U.S.Pub-20040029529) discloses Server device and information processing device.

**Diwan et al.** (U.S.Pub-20020198937) discloses Content-request redirection method and system.

**Maeda et al.** (U.S.Pub-20020087677) discloses Information processing method and apparatus and recording medium.

**Kalavade et al.** (U.S.Pub-20030051041) discloses Method and apparatus for integrating billing and authentication functions in local area and wide area wireless data networks.

**Stewart et al.** (U.S-pat-6259405) discloses Geographic based communications service.

### ***Conclusion***

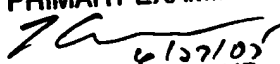
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khai M Nguyen whose telephone number is 571.272.7923. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on 571.272.7922. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Khai Nguyen  
Au:2687

6/17/2005

LESTER G. KINCAID  
PRIMARY EXAMINER  
  
6/17/05  
LESTER G. KINCAID  
PRIMARY EXAMINER